30

35

5

10

Claims: What is claimed:

- 1. A vehicular headlight system producing a light distribution area, comprising a means for sensing the location of other vehicles, a means for diminishing the amount of light directed to said other vehicles, wherein light directed to areas within the light distribution area not containing said other vehicles is not diminished.
- 2. The headlight system of claim 1 wherein said means for sensing receives photons which are converted to electrical signals.
- 3. The headlight system of claim 1 wherein said vehicular headlight system comprises at least one head light which contains at least two lighting elements each of said elements being individually controllable with regard to light intensity emitted there from.
- 4. The headlight system of claim 1 wherein said vehicular headlight system comprises at least one head light which contains at least two light filter elements, each of said elements being individually controllable with regard to controlling the intensity of light permitted to pass there through.
- 5. The headlight system of claim I wherein said vehicular headlight system comprises at least one head light which contains at least two light directing elements, each of said elements being individually controllable with regard to the output direction of light permitted to pass there through.
- 6. A vehicular headlight apparatus on a first vehicle, comprising, a means for sensing the presence of a second vehicle, a means for determining the location of said second vehicle, a means for diminishing the amount of light directed to said second vehicle, while concurrently not diminishing the amount of light directed from said headlight apparatus to areas not occupied by said second vehicle.
- 7. The headlight apparatus of claim 6 wherein said means for sensing receives photons which are converted to electrical signals.
- 8. The headlight apparatus of claim 6 wherein said vehicular headlight apparatus comprises at least one headlight which contains at least two lighting elements each of said elements being individually controllable with regard to light intensity emitted there from.
- 9. The headlight apparatus of claim 6 wherein said vehicular headlight apparatus comprises at least one head light which contains at least two light filter elements, each of said elements being

30

40

5

individually controllable with regard to controlling the intensity of light permitted to pass there through.

- 10. The headlight apparatus of claim 6 wherein said vehicular headlight apparatus comprises at least one head light which contains at least two light directing elements, each of said elements being individually controllable with regard to the output direction of light permitted to pass there through.
- 11. An illumination process, comprising
 a means for sensing the location of vehicles,
 a means for diminishing the amount of light directed to said vehicles, wherein
 light directed to at least one area not containing said other vehicles is not diminished.
 - 12. The illumination process of claim 11 wherein said means for sensing receives photons which are converted to electrical signals.
 - 13. The illumination process of claim 11 wherein said illumination process comprises at least one headlight which contains at least two lighting elements each of said elements being individually controllable with regard to light intensity emitted there from.
 - 14. The illumination process of claim 11 wherein said illumination process comprises at least one head light which contains at least two light filter elements, each of said elements being individually controllable with regard to controlling the intensity of light permitted to pass there through.
 - 15. The illumination process of claim 11 wherein said illumination process comprises at least one head light which contains at least two light directing elements, each of said elements being individually controllable with regard to the output direction of light permitted to pass there through.
 - 16. A vehicular headlight system, wherein said system's light distribution area is segmented into at least two segments, wherein the intensity of light directed to each said segment is independently controlled.
- 17. The headlight system of claim 16 wherein said means for sensing receives photons which are converted to electrical signals.
 - 18. The headlight system of claim 16 wherein said vehicular headlight system comprises at least one head light which contains at least two lighting elements each of said elements being individually controllable with regard to light intensity emitted there from.

5

10

19. The headlight system of claim 16 wherein said vehicular headlight system comprises at least one head light which contains at least two light filter elements, each of said elements being individually controllable with regard to controlling the intensity of light permitted to pass there through.

20. The headlight system of claim 16 wherein said vehicular headlight system comprises at least one head light which contains at least two light directing elements, each of said elements being individually controllable with regard to the output direction of light permitted to pass there through.